

INTRODUCTION**MENTAL HEALTH EVALUATIONS**

Mental health evaluations of aircrew are conducted by licensed mental health practitioners in consultation with the flight surgeon. Command-directed mental health evaluations are conducted in accordance with MEDCOM Reg 40-38, DOD Instruction 6490-4 and DOD Directive 6490.1

A mental health evaluation should reflect a detailed history of illness from initiation until the present time. It should cover precipitating events, signs, symptoms, and pertinent family, social occupational and medical history. Any other information such as legal history or educational background that may have bearing on the case should be included. Substance and alcohol use history is required in all cases. Physical exam results and any other pertinent studies should also be included in the evaluation.

At initial presentation of the illness, the patient undergoes a mental status examination that should be summarized in the evaluation along with the current status of the patient. The evaluation should also include the results of psychological testing as indicated by the parameters of the case, for example, neuropsychological testing for cognitive deficits.

The mental health evaluation should also include a diagnostic impression based on criteria from the current version of the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, (DSM-IV) and Axes I-IV of the Multiaxial Evaluation System. Recommendations for clinical follow-up/therapy should also be reported. Issues of risk to aviation safety, prognosis, and limitations to deployability must also be addressed.

CONFIDENTIALITY OF MENTAL HEALTH INFORMATION

Although command and medical personnel may need information about an aircrew member's mental health status in order to make decisions about aeromedical disposition, special care is taken to maintain the confidentiality of mental health information to the fullest extent possible and to limit the disclosure of such information to the minimum amount necessary and only to persons with an *official need to know*.

AEROMEDICAL POLICY LETTERS

The following policies outline each chapter of the DSM-IV, which should be used as a reference for diagnostic criteria and coding. The policies provide practice guidelines and requirements for clinical follow-up as indicated. With sufficient information, the Aeromedical Consultants Advisory Panel (ACAP) can make decisions that preserve resources, maximize safety, and expedite case disposition.

CONDITION: AEROMEDICAL ADAPTABILITY (AA) Revised JUN 2005

AEROMEDICAL CONCERNS: Unsatisfactory AA is not a diagnosis, but is a determination by the FS and aviation commander of suitability or adaptability. Unsatisfactory AA (formerly ARMA) may be a manifestation of underlying psychiatric disease, personality trait(s) or other behavioral factors not considered compatible with aviation duties (see AR 40-501 for more information). Assessment of unsatisfactory AA is made in consultation with an aeromedically trained psychiatrist or psychologist.

WAIVERS: Trained aircrew with an unsatisfactory AA will be referred to the aviation unit commander or civilian employee supervisor for administrative evaluation for nonmedical disqualifications and determination of fitness to retain an aeronautical rating and military status (see AR 600-105). Initial flight applicants with an unsatisfactory AA will not be granted an exception to policy. Reversal of this disqualification at a later date is very difficult. However, if the crew member demonstrates substantial behavior change over a period of 2-3 years and a level of insight that would support sustained adaptive functioning in the aviation environment, accompanied by strong recommendations from local command and the local flight surgeon, s/he may be considered for reversal of an unsatisfactory AA.

INFORMATION REQUIRED: Requests for waiver will include a complete AMS to include the results of an evaluation conducted by an aeromedically trained psychiatrist or psychologist. Psychological testing is required, and results will be reported in the AMS. A recommendation from the aviation unit commander or civilian supervisor is also required. All legal issues such as sexual or racial discrimination or harassment must receive appropriate administrative action including UCMJ and/or IG determination before a final medical recommendation can be made.

FOLLOW-UP: N/A

TREATMENT: If an underlying psychiatric disorder exists, treatment corresponds to the particular diagnosis. Treatment does not apply if the underlying reason for the unsatisfactory AA is other than psychiatric.

DISCUSSION: An unsatisfactory AA is not a DSM IV diagnosis. It is a consensus of opinion endorsed by the Commander, USAAMC, after thorough investigation involving the unit flight surgeon, aeromedical psychiatrist/psychologist, and the aviation chain of command (military) or civilian supervisory chain, that certain behavior or conduct is not adaptable to or is unsuitable for Army aeronautics. An unsatisfactory AA must not be used if a FEB or other legal, administrative, or medical action is appropriate and sufficient to decide the disposition of the aircrew member. Rated aviators will not normally be considered for waiver of an unsatisfactory AA unless overwhelming evidence and support exist from command as well as the local flight surgeon.

CONDITION: ADJUSTMENT DISORDERS

Revised JUN 2005

AEROMEDICAL CONCERNS: Adjustment Disorders are characterized by the development of clinically significant emotional or behavioral symptoms in response to an identifiable psychological stressor. Fitness for flight status will be determined by the severity and the required treatment.

WAIVER: Complete recovery without chronicity or medications supports waiver consideration. A mild Adjustment Disorder with complete recovery within 90 days can be considered "Information Only." If the disorder persists beyond 90 days the aviator is disqualified and a waiver is required. An evaluation by a qualified mental health professional is required prior to waiver consideration.

DSM-IV CODES:

- 309.xx Adjustment Disorder (Specify if: Acute/Chronic):
- .0 With Depressed Mood
 - .24 With Anxiety
 - .28 With Mixed Anxiety and Depressed Mood
 - .3 With Disturbance of Conduct
 - .4 With Mixed Disturbance of Emotions and Conduct
 - .9 Unspecified

(For diagnostic criteria, see DSM-IV-TR)

INFORMATION REQUIRED:

- Complete AMS outlining social, occupational, administrative or legal problems associated with the case.
- Psychiatric and psychological evaluation as indicated, to include present functioning.
- Treatment summary
- Letters from the aviator's supervisor and treating psychiatrist or psychologist supporting a return to flying status.

TREATMENT: Psychotherapy is incompatible with flying to the extent that it is a treatment for symptoms that qualify the individual for a diagnosis of Adjustment Disorder. Follow-up psychotherapy is compatible with flying duties when it is for mild symptoms or stress management *after* the aircrew member no longer qualifies for an Adjustment Disorder diagnosis. Medication is incompatible with flying duties.

DISCUSSION: Most individuals with Adjustment Disorder experience full recovery; however, some progress to chronicity and would thus be considered for permanent disqualification. A severe Adjustment Disorder with violence, suicidality, or other significantly deviant behavior requires review for waiver. The US Air Force experience

includes 60 FCII aviators diagnosed with adjustment disorders of greater than 60 days duration in a 15 year (1981-1996) review. Forty-one (67%) were waived to return to fly.

REFERENCES:

PsychNet-UK. Online Psychological Services. Last updated 21 August 2003.
http://www.psychnet-uk.com/dsm_iv/adjustment_disorder.htm
Adjustment Disorders. eMedicine.com. Last Updated: 3 September 2004.
<http://www.emedicine.com/med/topic3348.htm>

CONDITION: SUBSTANCE-RELATED DISORDERS

Revised JUN 2005

ALCOHOL ABUSE OR DEPENDENCE

AEROMEDICAL CONCERNS: Ethyl alcohol has a depressant effect on the CNS. Subtle performance effects such as procedural errors, decreased reaction time, and inattentiveness may occur even after low doses. More importantly, alcohol consumption can cause disorientation, including production of positional alcohol nystagmus and vertigo and impairment of the ability to suppress inappropriate vestibular nystagmus. This susceptibility exists long into the "hangover" period. Ingestion of alcohol causes reduced Gz tolerance by 0.1-0.4 G. Alcohol is associated with a higher accident rate in both ground and flight operations. Chronic ingestion with associated CNS, GI, and CV effects can produce performance degradation in flight and ground jobs.

WAIVER: Exception to policy is not recommended. Waiver is possible if the patient: (1) Maintains unqualified acknowledgment of the alcohol abuse disorder. (2) Successfully completes the appropriate treatment program. (3) Remains abstinent for 90 days without need for medication. (4) Maintains satisfactory participation with documentation in an organized alcohol recovery program (AA, Rational Recovery, etc.), 3-5 times per week for the first 90 days of recovery and then 1-3 times per week thereafter for a period of 5 years total. **Noncompliance:** Continued denial of an alcohol problem and refusal to abstain from alcohol following treatment are grounds for permanent termination from aviation duties. Any relapse requires resubmission for waiver. Waivers for relapses with further outpatient and/or residential treatment are rarely granted by HRC.

DSM IV CODES:

Alcohol Use Disorders:

303.90 Alcohol Dependence

305.00 Alcohol Abuse

Alcohol-Induced Disorders:

303.00 Alcohol Intoxication/291.8 Alcohol Withdrawal (Specify if: With Perceptual Disturbances)

291.0 Alcohol Intoxication Delirium/291.0 Alcohol Withdrawal Delirium

291.2 Alcohol-Induced Persisting Dementia/291.1 Alcohol-Induced Persisting Amnestic Disorder

291.x Alcohol-Induced Psychotic Disorder

.5 With Delusions (Specify: With Onset During Intoxication or During Withdrawal)

.3 With Hallucinations (Specify: With Onset During Intoxication or During Withdrawal)

291.8 Alcohol-Induced Mood Disorder/291.8 Alcohol-Induced Anxiety Disorder
291.8 Alcohol-Induced Sexual Dysfunction/291.8 Alcohol-Induced Sleep Disorder
(For diagnostic criteria, see DSM-IV, page 175.)

INFORMATION REQUIRED: (1) Complete flight physical, CBC, and LFTs. (2) A complete AMS with the flight surgeon's recommendations to include a search for underlying psychiatric disorders, medical disorders, or significant social or family dysfunction and a detailed description of the aircrew member's drinking history. (3) Copy of ASAP outpatient or inpatient/residential (or civilian equivalent) treatment summary. (4) FS and ASAP Clinical Director's statement to document aftercare including AA attendance. (5) Chain-of-command recommendations through the general officer level.

FOLLOW-UP REQUIREMENTS: An active sobriety program with continued abstinence is essential. The member must visit the following professionals at the intervals specified: (1) Flight surgeon, monthly for the first year, every 3 months for the 2nd and 3rd years, every 6 months for the 4th and 5th years, then annually thereafter. (2) ASAP Clinical Director, monthly for the first year, every 3 months for the 2nd year, and then annually for the 3rd through 5th years. (3) Annual submission of the flight surgeon's recommendations, ASAP counselor's recommendations, documentation of AA attendance, and a letter of support from the aviation unit commander are also required for a period of 5 years total.

TREATMENT: ASAP outpatient or inpatient/residential program as clinically indicated.

DISCUSSION: Acute alcohol intoxication is implicated in about 16 percent of general aviation fatal accidents. The risk of liver damage in men drinking 80gm ethanol (equivalent to one 6-pack of beer, 3-4 mixed drinks, or 4-6 glasses of wine) and in women drinking about 50gm a day for some years has been reported as 15 percent. Acute alcohol intoxication can produce arrhythmias that usually disappear quickly but can leave moderate conduction delays for up to one week (the "holiday heart" syndrome). Although relapse after treatment for alcohol dependence may be as high as 41% at two years, it is "rare after five years" according to Vaillant, with a rate of about 7%, less than the incident risk in the general population. However, the prognosis is much better for professionals (e.g., physicians, pilots, and lawyers) than for the general population, probably related to the potential loss of professional status. Note: Non-alcoholic beer is considered an alcoholic beverage. The 12-hour "bottle-to-throttle" rule (see AR 40-8) applies to drinking non-alcoholic beer.

REFERENCES:

Vaillant, G, *The Natural History of Alcoholism*, Alcohol Health and Research World, 1996, (20) 3, 152-161.
O'Brien, C and McLellan A, *Myths about the Treatment of Addiction*, Lancet 1996; 347: 237-240.

ABUSE OF CONTROLLED SUBSTANCES

Revised JUN 2005

AEROMEDICAL CONCERNS: Abuse of controlled substances, to include anabolic steroids, marijuana, prescription medications, and other psychoactive substances is incompatible with aviation service and presents a serious risk to aviation safety.

WAIVER: Abuse of controlled substances is disqualifying for all aviation related duties. Exception to policy is not recommended but may be requested for history of experimental (not habitual) use of cannabinoids or other drugs, short of addiction or dependence, if there is evidence of current drug abstinence, no history of drug abuse treatment and the individual is otherwise qualified for aviation service. Trained aircrew will not normally be considered for waiver of substance abuse unless overwhelming evidence and support exist from command as well as the local flight surgeon and ASAP Clinical Director.

INFORMATION REQUIRED: For exception to policy the following info is required: (1) Complete flight physical. (2) A complete AMS with the flight surgeon's recommendations to include a search for underlying psychiatric disorders, medical disorders, or significant social or family dysfunction. (3) Report of evaluation and recommendations by ASAP, to include a detailed description of the aircrew member's use of controlled substances.

TREATMENT: As clinically indicated.

DISCUSSION: According to a study conducted by the U.S. Substance Abuse and Mental Health Services Administration (SAMHSA), in 1999 an estimated 14.8 million Americans were current illicit drug users. This estimate represents 6.7 percent of the population 12 years old and older. Marijuana is the most commonly used illicit drug in the U.S. and in the U.S. Army (according to 2001 Army statistics). The highest rate of illicit drug use in the SAMHSA study was found among persons aged 18-20 years, with rates of use between 20 and 21 percent. For these older youths, use is dominated by marijuana (18 percent of sample). The rates of use generally decline in each successively older age group, with the exception of the 40-44 year old age group. Members of this cohort were teenagers during the 1970s, the period when drug use incidence and prevalence rates were rising dramatically.

Relapse rates for cocaine and opioids are higher than those for alcohol in the first year of sobriety in many studies (although studies of opioid dependence usually focus on heroin addicts rather than prescription drug abusers). However, the prognosis is much better for professionals (e.g., physicians, pilots, and lawyers) than for the general population, with even higher success rates for the treatment of cocaine and opioid dependence than for alcohol, probably related to the potential loss of professional status. This finding is true in rural populations as well, probably due to issues of availability and social acceptance (greater for alcohol, nicotine dependence has the worst prognosis of all), which are also operative in the military.

Applicants to Army aviation that have used controlled substances experimentally may be found unfit for flying duties. Given the prevalence in current society of young individuals that have experimented with controlled substances on a limited basis, short of addiction, exception to policy may be considered on a case-by-case basis. However, Army aircrew that misuse or abuse controlled substances are without exception medically unfit for flying duties secondary to the serious cognitive, psychomotor and other physical impairment caused by these substances. These individuals may also be subject to disciplinary and administrative action by the aviation command.

REFERENCES:

- Vaillant, G, *The Natural History of Alcoholism*, Alcohol Health and Research World, 1996, (20) 3, 152-161.
- O'Brien, C and McLellan A, *Myths about the Treatment of Addiction*, Lancet 1996; 347: 237-240.
- Burge SK. Alcohol Related Problems: Recognition and Intervention. Am Fam Physician 1999;59(2): 361-70, 372

ALCOHOL-RELATED DISORDER, NOS (Alcohol Misuse) Revised JUN 2005

AEROMEDICAL CONCERNS: While a single incident of alcohol misuse (mild or minimal alcohol-related problem) is not of significant concern, it may be an indication of underlying alcohol abuse or dependence.

WAIVER:

Initial Applicants (Class 1A/1W):

A single episode of alcohol misuse will be filed as Information Only provided that a current (within 90 days of the date of FDME submission) Alcohol Substance and Abuse Program (ASAP) evaluation reveals no underlying problem with abuse or dependence. Multiple episodes will require a request for exception to policy and are rarely granted.

Initial Applicants (Classes 2F, 3, and 4):

A single episode of alcohol misuse will be filed as Information Only provided that a current Alcohol Substance and Abuse Program (ASAP) evaluation reveals no underlying problem with abuse or dependence. Multiple episodes will require a request for waiver and these will be evaluated on a case-by-case basis.

Rated Aviation Personnel (All Classes):

A single episode of alcohol misuse will be filed as Information Only provided that a current Alcohol Substance and Abuse Program (ASAP) evaluation reveals no underlying problem with abuse or dependence. Multiple episodes will require a request for waiver and these will be evaluated on a case-by-case basis.

DSM-IV CODE: 291.9 Alcohol-Related Disorder, NOS

INFORMATION REQUIRED:

1. For a single episode of alcohol misuse
a copy of a recent ASAP evaluation must be submitted with the FDME.
2. For multiple episodes an AMS must be submitted with the following:
 - Completion of an alcohol education program, such as PERR, (Prevention, Education, Risk Reduction) or equivalent and a favorable recommendation from the program director.
 - Letters of recommendation and support from the immediate aviation chain of command to the level of Bn CO.
 - Flight surgeon recommendations and a summary of findings, to include: absence of any significant underlying psychological or psychiatric disorders or evidence of lasting or residual health impairment or significant work, social, or family dysfunction.
 - Laboratory Evaluation: CBC, Liver Function Tests to include AST/ALT and Gamma GT.

FOLLOW-UP: The local flight surgeon will continue to reevaluate the individual at 2-month intervals for the first year after return to full flying duties and then annually in conjunction with annual FDME.

TREATMENT: An alcohol education program is generally adequate therapy. **NOTE:** If the aircrew member requires disulfiram as treatment or to demonstrate abstinence, then the condition cannot be classified as alcohol misuse. Refer to APLs for alcohol abuse and dependence.

DISCUSSION: Alcohol-related incidents such as driving under the influence (DUI), under age drinking, and public intoxication resulting in unusual, bizarre, or violent behavior or any other alcohol-related misbehavior, which in the opinion of the commander or the flight surgeon deserves attention, must be viewed with caution because of the potential for creating unusual stress on the aviator. These stressors may arise from pending legal action, command pressure, marital discord, or even self-generated pressures. Local Duties Not Including Flying (DNIF) is appropriate pending completion of evaluations and will allow the aviator time to cope with these demands. A single episode of alcohol abuse may reflect an isolated event, but may represent the initial presentation of an underlying substance problem and deserves thorough evaluation by the unit FS/APA.

The Alcohol-Related Disorder, NOS or Alcohol Misuse category is for disorders associated with the use of alcohol that are not classifiable as Alcohol Dependence, Alcohol Abuse, Alcohol Intoxication, Alcohol Withdrawal, Alcohol Intoxication Delirium, Alcohol Withdrawal Delirium, Alcohol-Induced Persisting Dementia, Alcohol-Induced Persisting Amnesic Disorder, Alcohol Induced Psychotic Disorder, Alcohol-Induced Mood Disorder, Alcohol-Induced Anxiety Disorder, Alcohol-Induced Sexual Dysfunction, or Alcohol-Induced Sleep Disorder.

REFERENCE:

Burge SK. Alcohol Related Problems: Recognition and Intervention. Am Fam Physician 1999;59(2): 361-70, 372

CONDITION: ANXIETY DISORDERS

Revised JUN 2005

AEROMEDICAL CONCERNS: Anxiety disorders may produce symptoms that are distracting in flight and occasionally result in autonomic symptoms such as hot flashes, sweating, nausea, and vomiting, as well as various mental deficiencies. Panic attacks can produce sudden incapacitation. Anxiety in aircrew may be a manifestation of unconscious fear of flying.

WAIVERS: Panic Disorder, Post-Traumatic Stress Disorder (PTSD), Acute Stress Disorder (ASD), Generalized Anxiety Disorder (GAD), Obsessive-Compulsive Disorder (OCD), and Anxiety Disorder NOS are considered disqualifying for all aviation-related duties. Waiver may be requested for ASD when the aviator is asymptomatic without medications for three months. Waiver may not be granted for true panic disorder or obsessive-compulsive disorder. Waiver may be considered for PTSD, ASD, GAD, and Anxiety Disorder NOS as part of the "Selective Monoamine Reuptake Inhibitor Surveillance Program." This requires that the crewmember remain free of aeromedically significant symptoms and medication side effects on a stable dosage of an acceptable medication for a minimum of four months before submission of a waiver request. Further recurrences of anxiety symptoms are disqualifying with permanent termination of flying duties. Specific Phobias and Social Phobias are considered medically disqualifying only if they impact on flight performance or flight safety.

DSM IV CODES:

300.01 Panic Disorder Without Agoraphobia

300.21 Panic Disorder With Agoraphobia

300.22 Agoraphobia Without History of Panic Disorder

300.29 Specific Phobia (Specify type: Animal Type/Natural Environment Type/Blood-Injection-Injury Type/Situational Type/Other Type)

300.23 Social Phobia (Specify if: Generalized)

300.3 Obsessive-Compulsive Disorder (Specify if: With Poor Insight)

309.81 Post-Traumatic Stress Disorder (Specify if: Acute/Chronic) (Specify if: With Delayed Onset)

308.3 Acute Stress Disorder

300.02 Generalized Anxiety Disorder

293.89 Anxiety Disorder Due to . . . (Indicate General Medical Condition) (Specify if: With Generalized Anxiety/With Panic Attacks/With Obsessive-Compulsive Symptoms)

____.____ Substance-Induced Anxiety Disorder (Refer to Substance-Related Disorders for substance-specific codes) (Specify if: With Generalized Anxiety/With Panic Attacks/With Obsessive-Compulsive Symptoms/With Phobic Symptoms) (Specify if: With Onset During Intoxication/With Onset During Withdrawal)

300.00 Anxiety Disorder NOS

(For diagnostic criteria, see DSM-IV, page 393.)

INFORMATION REQUIRED:

1. Detailed clinical interview by an aeromedically trained clinical psychologist or psychiatrist to include target symptoms, medication history, and specific diagnostic conclusions.
2. Review of treatment records.
3. Neuropsychological assessment and in-flight performance evaluation are also required if waiver is sought for the use of an approved medication. Refer to the “Selective Monoamine Reuptake Inhibitors Surveillance Program” for specific requirements.

FOLLOW-UP: Psychiatric follow-up for anxiety disorders is at the discretion of the treating mental health provider. Anxiety Disorder patients are generally seen at least monthly while on limited duty. If a waiver has been granted for the use of medication, consultation with an aeromedically trained psychiatrist will be completed every 6 months, and before resuming flying duties after any change in dosage or discontinuation of medication.

TREATMENT: The indicated treatments are psychotherapy and psychotropic medications, either alone or in combination.

DISCUSSION: Anxiety disorders are among the most prevalent in the general population, although depression is the most common among *clinical* populations. Patients with PTSD, Acute Stress Disorder, Panic Disorder and GAD may complain of palpitations, dizziness, headaches, shortness of breath, tremulousness, and impaired concentration and memory. OCD patients complain of obsessive rumination and/or compulsive rituals that interfere with functioning. Long-term prognosis for Anxiety Disorders is a matter of some debate and varies depending on diagnosis. Panic Disorder has a high rate of recurrence and is frequently associated with Major Depressive Disorder. Acute Stress Disorder that continues beyond one month would be reclassified as PTSD.

CONDITION: ATTEMPTED SUICIDE

Revised JUN 2005

AEROMEDICAL CONCERNS: There is a risk that a person with suicidal ideation may attempt suicide in an aircraft and even jeopardize the safety of others. Aircraft have occasionally been the selected means of suicide in civil aviation, but there are no known Army aviation accidents where suicide was confirmed. According to AR 40-501, history of suicide attempt or suicidal gestures is disqualifying.

WAIVER: A "suicide attempt" itself is a behavior, not a DSM-IV psychiatric diagnosis. Waivers are based in part on the psychiatric diagnosis of which the suicidal behavior is a manifestation. Additionally, waivers are based upon (1) the effectiveness of the remediation of the precipitating causes for the attempt, (2) the quality and duration of emotional and behavioral stability, and (3) reports from supervisors, the local flight surgeon, and mental health. *Recurrent* suicidal ideation, gestures or attempts are the basis for permanent disqualification. Exception to policy for history of suicide attempt is not recommended but may be considered using the guidelines above.

INFORMATION REQUIRED: Complete AMS with report of psychiatric evaluation, to include a detailed account of the suicidal behavior. Psychological testing will be conducted and reported as indicated. In addition to the criteria for waiver mentioned above, the aviator should be symptom-free and treatment should be completed for at least six months before waiver will be considered.

TREATMENT: Treatment is based on the individual's psychiatric diagnosis. However, primary emphasis should be on the assessment of dangerousness and ensuring the safety of the patient. Inpatient hospitalization may be indicated.

FOLLOW-UP: Follow-up psychiatric care is at the discretion of the treating mental health provider, and the frequency should be clearly stated in the psychiatric evaluation or hospital discharge summary.

DISCUSSION: Of those who make a suicidal gesture, 66 percent are involved in acute personal crisis and many will have ingested alcohol within 6 hours of the attempt. Within one year, 20-25 percent will repeat the attempt and 2 percent will be successful. There is an underlying personality disorder in 20-25 percent of cases. In those who go on to successful suicide, 70 percent confide their intentions to someone before doing so. Risk factors include living alone, recent stress or loss, being male (especially over 45 years of age), heavy drinking, and a family history of alcohol dependence, mental illness, or suicide.

**CONDITION: DELIRIUM, DEMENTIA, AND AMNESTIC AND OTHER
COGNITIVE DISORDERS**

Revised JUN 2005

AEROMEDICAL CONCERNS: Impaired cognitive performance due to organic conditions renders individuals unfit for flight.

WAIVERS: Conditions that are temporary and completely reversible with treatment would be considered for waivers, depending upon the underlying cause.

DSM-IV CODES: For the appropriate codes and diagnostic criteria, see DSM-IV, page 123.

INFORMATION REQUIRED: AMS including complete physical and lab findings and reports of neurological, psychiatric and neuropsychological evaluations.

FOLLOW-UP REQUIREMENTS: As medically indicated.

TREATMENT: As medically indicated.

DISCUSSION: See "Neurology" policy for information concerning Cognitive Disorders due to head injury.

CONDITION: LEARNING DISORDERS, ATTENTION DEFICIT/HYPERACTIVITY DISORDER AND OTHER DISORDERS USUALLY FIRST DIAGNOSED IN INFANCY, CHILDHOOD, OR ADOLESCENCE

Revised JUN 2005

AEROMEDICAL CONCERNS: The majority of these disorders do not apply to the adult aviator population. However, childhood and adolescent learning disorders and Attention Deficit/Hyperactivity Disorder and disruptive behavior disorders may have adult manifestations that could affect the safety of flight. The label "learning disability," once associated with reading problems, is now a non-specific term for numerous disorders of cognition with childhood onset and varying levels of severity. This variability directly impacts the specific disorder's aeromedical significance, making *knowledgeable evaluation of the individual*, rather than simple identification of the diagnosis, essential to the final aeromedical disposition.

WAIVERS: Exception to policy and waivers can be considered if medications, (e.g., stimulants) are not needed to maintain adequate performance and if behavioral characteristics do not hinder flight performance or flight safety.

DSM IV CODES: For the appropriate codes and diagnostic criteria, see DSM-IV, page 37.

INFORMATION REQUIRED: Complete AMS to include psychiatric and neuropsychological evaluation.

TREATMENT: Many of the conditions are not amenable to treatment and/or require continuous treatment.

DISCUSSION: Childhood Learning Disorders (LD) and Attention-deficit/Hyperactivity Disorder (ADHD), once thought to "burn themselves out" in adolescence, can persist into adulthood (Spencer et al., 1998; Barkley, Hill & Schoener, 1997). Both genetic and environmental factors are undoubtedly important in the etiology of these disorders. Physiological as well as anatomic markers are being sought. Still, current practice requires clinical, historical, and often psychometric indicators in order to make these diagnoses. Learning disorders may be associated with underlying abnormalities in cognitive function, including deficits in attention, memory, or linguistic processes. Impaired vision or hearing may affect learning ability and should be investigated through audiometric or visual screening tests. A learning disorder may be diagnosed in the presence of such sensory deficits *only* if the learning difficulties are in excess of those usually associated with these deficits.

ATTENTION DEFICIT HYPERACTIVITY DISORDER

Revised JUN 2005

AEROMEDICAL CONCERNS: An inability to sustain or appropriately divide attention is not compatible with aviation service.

WAIVERS:

Initial Class 1A/1W Applicants:

A history of ADHD is disqualifying. Exceptions to policy are sometimes granted for initial flight applicants provided all the information below is submitted for review by USAAMA.

Initial Class 2F, 2P, Class 3, and Class 4 Applicants:

A history of ADHD is disqualifying on initial FDME. Waivers are possible provided all the information below is submitted for review by USAAMA.

Aviation Personnel (all classes):

New diagnosis of adult ADHD will be evaluated case-by-case based on the information listed below.

INFORMATION REQUIRED:

1. Detailed clinical interview by a clinical psychologist or psychiatrist to include developmental, academic, employment, psychiatric, social, drug, alcohol, criminal driving infraction and medication history, with special attention to other psychiatric conditions that may contribute to symptoms.
2. Review of treatment records.
3. If clinical interview and records review suggest normal attention or inappropriate diagnosis of ADHD in childhood or adolescence this may be noted as "information only."
4. If interview and records review suggest positive findings for ADHD, a detailed neuropsychological assessment to include cognitive domains, IQ, and achievement testing is required. If treatment includes the use of medication(s), this assessment should be conducted both on and off medication. An in-flight performance evaluation in either actual aircraft or a simulator is recommended concurrent with each of the neuropsychological assessments to add ecological validity.
5. Continuous Performance Testing (e.g., Conners, Integrated Visual and Auditory Continuous Performance Test, TOVA) is recommended.

FOLLOW-UP:

The diagnosis of childhood ADHD that has not required treatment since adolescence, and does not prove to be currently impacting the individual based on testing, will not require annual follow-up. Those diagnosed with adult ADHD will require annual follow up with a treating psychologist or psychiatrist.

TREATMENT:

Treatment of ADHD will be considered on a case-by-case basis. Indication of mild to moderate ADHD with demonstrably improved performance on objective testing will be considered more favorably. Behavioral management strategies should be maximized before resorting to the use of medications in aircrew. Waiver for the chronic use of stimulant medication in aviators will not be considered. Waivers for the use of the

Selective Monoamine Reuptake Inhibitors bupropion (Wellbutrin®) and atomoxetine (Strattera®) may be considered if supported by the assessment above and the crewmember has remained free of aeromedically significant symptoms and medication side effects on a stable dosage for a minimum of three months.

DISCUSSION:

The diagnosis of ADHD in children and adults can be difficult. Some adults may have inappropriately received the diagnosis in childhood or adolescence. In addition, many adults with poor concentration without hyperactivity may have ADHD but were never diagnosed in childhood. Utilizing neuropsychological testing will assist in quantify the extent of the condition as well as favorable response to treatment.

CONDITION: DISSOCIATIVE DISORDERS

Revised JUN 2005

AEROMEDICAL CONCERNS: These disorders feature a disruption of integrated functions of consciousness, memory, and identity or perception of the environment. This impairment of cognitive abilities is incompatible with flying duties.

WAIVER: Dissociative Disorders are chronic, unpredictable, and difficult to treat. Exception to policy and waiver are not considered.

DSM-IV CODES:

300.12 Dissociative Amnesia

300.13 Dissociative Fugue

300.14 Dissociative Identity Disorder

300.6 Depersonalization Disorder

300.15 Dissociative Disorder NOS

(For diagnostic criteria, see DSM-IV, page 477.)

INFORMATION REQUIRED: Complete AMS with psychiatric evaluation.

TREATMENT: As psychiatrically indicated.

DISCUSSION: Treatment is often long-term, and effects of dissociative disorders bar any consideration for flight status.

AEROMEDICAL CONCERNS: Eating disorders can cause potentially life-threatening metabolic alkalosis, hypochloremia, and hypokalemia, which can have drastic implications for aviation safety. Anxiety and depressive symptoms are common, and suicide is a risk.

WAIVERS: Eating Disorders (Anorexia, Bulimia, and Eating Disorders NOS) are disqualifying for all aviation duties. Reports of PEB and MEB, if available, are required. Many of the soldiers with these disorders will be discharged via a PEB medical board due to lack of treatment options within the military. Waiver may be considered on a case-by-case basis if the patient is off medication, symptom-free, and fully functional in an alternate duty assignment for one year. These patients must meet the minimum aviation weight standards.

DSM-IV CODES:

307.50 Eating Disorder

307.51 Bulimia

307.1 Anorexia Nervosa

(For diagnostic criteria, see DSM-IV, page 539.)

INFORMATION REQUIRED: Submit a full AMS to include: Psychiatric evaluation, results of psychological testing (as indicated), copy of MEB if applicable, and flight surgeon's narrative outlining any social, occupational, administrative, or legal problems of the patient.

FOLLOW-UP: Follow-up psychiatric care is at the discretion of the treating mental health provider, but should involve at least monthly follow-up during the first year of treatment.

TREATMENT: Treatment is very difficult and involves intensive, long-term therapy, group therapy, and possibly pharmacotherapy, all of which are incompatible with aviation duty.

DISCUSSION: Relapse rate is high. With long-term follow-up treatment of anorexia, 40 percent of patients recover, 30 percent improve, and 30 percent are chronic. Anorexia is potentially fatal in 5-12 percent of cases. Bulimia is often associated with alcohol abuse.

AEROMEDICAL CONCERNS: Stereotyped or impulsive behavior may lead to aviation safety problems. These disorders involve an inability to resist acting on an impulse that can be dangerous to self or others and that is characterized by a sense of pleasure when gratified. These disorders occur very infrequently among military aviators. Disorders of impulse control, when present, include features that are incompatible with mission readiness and flying safety. Their presence may also arouse specific perceptions and concerns in other aircrew about leadership, reliability, and trustworthiness.

Persons with Intermittent Explosive Disorder may have a significant history of unstable interpersonal relationships, illegal behavior, and substance abuse, and so would be unlikely to complete a rigorous pilot training program. A troublesome pattern might include isolated outbursts of extreme temper with long periods of reasonably normal functioning, which differs from the more diffuse and continuous impulsivity of a personality disorder.

The features of the other Impulse Disorders may not bear as directly upon cockpit safety. However, such behaviors as compulsive gambling, thievery or fire-setting may disrupt sleep, consume time and mental energy, and cause anxiety or stress-related distractions. Any of these factors can affect primary flying duties. Thus, administrative or legal action may be required even if the primary problem is not medically disqualifying. Also, keep in mind the possibility of a reverse effect: the increased stresses of an aviation career (or, indeed, any increased life stressors) may precipitate increased manifestations of any underlying problem with impulse control.

WAIVERS: Impulse Control Disorders (Intermittent Explosive Disorder, Kleptomania, Pathological Gambling, Pyromania, Trichotillomania) are considered permanently disqualifying with no waiver recommended. These cases are handled on a case-by-case basis and questions should be referred to USAAMA.

DSM IV CODES:

- 312.31 Pathological Gambling
- 312.32 Kleptomania
- 312.33 Pyromania
- 312.34 Intermittent Explosive Disorder
- 312.39 Trichotillomania
- 312.30 Impulse-Control Disorder NOS

(For diagnostic criteria, see DSM-IV, page 609.)

INFORMATION REQUIRED: Psychiatric evaluation and flight surgeon's narrative outlining any social, occupational, administrative, or legal problems of the patient are

required.

FOLLOW-UP: Follow-up psychiatric care is at the discretion of the mental health provider.

TREATMENT: Psychotropic medications used with Intermittent Explosive Disorder and Trichotillomania are incompatible with aviation duty. Pathological Gambling and Kleptomania are generally treated with behavior therapy.

DISCUSSION: Differential diagnosis should include substance abuse, temporal lobe epilepsy, head trauma, Bipolar Disorder (Manic Episode), and Personality Disorder (e.g., Antisocial or Borderline). The diagnosis is usually not made if the behavior occurs only in the context of another mental disorder such as Schizophrenia or Bipolar Disorder, or when it is associated with a personality disorder such as Borderline Personality Disorder. Isolated incidences of poor impulse control that violate policy, regulation, or the UCMJ should be dealt with administratively by the command rather than medically. A repeated pattern of poor impulse control that does not fit one of the specific diagnoses above and is not a manifestation of another mental disorder may be diagnosed as Impulse Control Disorder NOS. If the pattern of impulsive behavior coexists with other character pathology but does not qualify for a Personality Disorder diagnosis, a label of unsatisfactory Aeromedical Adaptability may be considered.

CONDITION: MENTAL DISORDERS DUE TO A GENERAL MEDICAL CONDITION NOT ELSEWHERE CLASSIFIED

Revised JUN 2005

AEROMEDICAL CONCERNS: Almost the entire spectrum of psychiatric disorders may be manifestations of primary medical conditions. Disqualification from flying would be based upon the underlying medical condition.

WAIVERS: Waiver depends on the specific medical condition, the course of the medical condition, and its residual effects on the patient's cognition, behavior, and emotional stability. Consideration for waiver also depends on the severity of the disorder and the required course of treatment.

DSM-IV CODES:

293.89 Catatonic Disorder Due to (Indicate the General Medical Condition.)

310.1 Personality Change Due to (Indicate the General Medical Condition.) (Specify type: Labile Type/Disinhibited Type/Apathetic Type/Paranoid Type/Other Type/Combined Type/Unspecified Type)

293.9 Mental Disorder Due to (Indicate the General Medical Condition.)

(For diagnostic criteria, see DSM-IV, page 165.)

INFORMATION REQUIRED: Complete AMS including psychiatric evaluation.

TREATMENT: As medically and psychiatrically indicated.

DISCUSSION: Refer to the APL of the underlying medical condition of concern.

AEROMEDICAL CONCERNS: Mood disorders are associated with decreased concentration, inattention, indecisiveness, fatigue, insomnia, agitation and occasionally psychosis, all of which are incompatible with aviation duties. Risk of suicide is 15 percent, the highest of all mental disorders. Dual diagnosis of a Mood Disorder and Substance Abuse or Dependence is common.

WAIVERS: Major Depression/Dysthymia/Depressive Disorder NOS: Disqualifying for all aviation duties. Exception to policy is not recommended. Waiver may be considered as part of the "Selective Monoamine Reuptake Inhibitors Surveillance Program." This requires that the crewmember remain free of aeromedically significant symptoms and medication side effects on a stable dosage of an acceptable medication for a minimum of four months before submission of a waiver request. Bipolar Disorder: Disqualifying for all aviation duties. The aviator should be referred to PEB for determination of general duty/retention.

DSM IV CODES:

(For diagnostic criteria, see DSM-IV, page 317.)

Depressive Disorders:

296.xx Major Depressive Disorder,

.2x Single Episode

.3x Recurrent

300.4 Dysthymic Disorder (Specify: Early Onset/Late Onset and with atypical features.)

311 Depressive Disorder NOS

Bipolar Disorders:

296.xx Bipolar I Disorder

.0x Single Manic Episode (Specify if: Mixed)

.40 Most Recent Episode Hypomanic

.4x Most Recent Episode Manic

.5x Most Recent Episode Depressed

.6x Most Recent Episode Mixed

.7 Most Recent Episode Unspecified

296.89 Bipolar II Disorder Specify (current or most recent episode):
Hypomanic/Depressed

301.13 Cyclothymic Disorder

296.80 Bipolar Disorder NOS

296.90 Mood Disorder NOS

INFORMATION REQUIRED:

1. Detailed clinical interview by an aeromedically trained clinical psychologist or psychiatrist to include target symptoms, medication history, and specific diagnostic conclusions.
2. Review of treatment records.
3. Neuropsychological assessment and in-flight performance evaluation are also required if waiver is sought for the use of an approved medication. Refer to the “Selective Monoamine Reuptake Inhibitors Surveillance Program” for specific requirements.

FOLLOW-UP: Psychiatric follow-up is at the discretion of the mental health provider. Mood Disorder patients are generally seen at least monthly while on limited duty. If a waiver has been granted for the use of medication, consultation with an aeromedically trained psychiatrist will be completed every 6 months, and before resuming flying duties following any change in dosage or discontinuation of medication.

TREATMENT: The indicated treatments are psychotherapy and psychotropic medications, either alone or in combination.

DISCUSSION: Fifteen percent of depressed patients eventually commit suicide. Fifty to seventy-five percent of affected patients have a recurrent episode, but this may be reduced with treatment. Acute major depression is treatable in 80 percent of patients. The prevalence of depression in aircrew is estimated to be about 6%, similar to the general population (Schneider, et al, unpublished data), yet the prospect of being grounded for an extended period has led many to forego treatment and suffer in silence, or to “go downtown” or to the Internet and use antidepressant medications without proper psychiatric or aeromedical supervision. This risk to aviation safety must be weighed against the potential use of newer psychotropic medications with well-established records of efficacy and minimal side effect profiles.

OTHER CONDITIONS THAT MAY BE A FOCUS OF CLINICAL ATTENTION: V CODES

Revised JUN 2005

AEROMEDICAL CONCERNS: The DSM-IV "V Codes" are broadly divided into three groups. *Relational Problems* (such as marital or parent-child problems) occur when maladaptive patterns of individual behavior within some sort of unit or group cause symptoms in the individuals, or impair function of the unit or group. *Problems Related to Abuse or Neglect* (such as spouse abuse or child neglect) may involve physically or sexually abusive behavior. The *Additional Conditions* (such as an occupational problem or spiritual problem) vary from Non-Compliance With Treatment through Bereavement to Phase of Life Problems. The 23 "V Codes" are listed in DSM-IV (1994, pp 680-6). V Codes are recorded on DSM-IV Axis I when they are the primary focus of clinical attention. When they are secondary to another disorder, they may be included on Axis IV.

The V Codes represent a psychiatric gray area in aerospace medicine. Many of the everyday problems faced by aviators may be described by V Codes. V Code issues may interfere with safe or effective flying, *or they may not*. Matters such as adjusting to different cultures, dealing with a recalcitrant child, or trying to save a failing marriage are of obvious aeromedical concern, but whether they are grounds for administrative or medical removal from flying duties, or for establishing a psychiatric diagnosis, are matters of degree. What becomes most relevant to aeromedical judgments is the *response of the aviator* to the stressor rather than the severity of the stressor. Numerous "small" stressors can produce fatigue, irritability, early task saturation, distraction and cognitive inefficiency as much as a single major stressor. Aeromedically dangerous responses include those of worry, anxiety, anger, depression, guilt, somatization, and behavioral acting-out. Other aeromedically relevant issues include disturbed patterns of sleep and/or eating, preoccupation, inability to relax, depressed or anxious mood, and especially changes in flying performance as assessed by the aviator, peers, and the supervisor.

The flight surgeon should approach V Code problems in aircrew carefully, using techniques that range from *informal discussion* as the least intrusive intervention to a *full mental health evaluation* as the most rigorous appraisal of whether the aviator should continue to fly. If an Axis I diagnosis seems warranted, it should be established in accordance with DSM-IV criteria and treated properly. Mental health counseling may also be indicated as a way of preventing a V code problem from overtaxing an aviator's resources even if no Axis I or II diagnosis other than a V code is warranted. *NOTE: beware of delaying or withholding diagnosis and proper treatment solely in order to avoid DNIF.* When the aviator has completed use of any medications, and the symptoms are sufficiently relieved so that return to flying is possible, then decide whether a waiver will be necessary. *NOTE: an aircrew member may be recommended for return to flying even though non-medication "talk therapy" is continuing when the symptoms have subsided sufficiently (during marital therapy, for example) to allow for safe flying.* In

some cases, the flyer may be able to resolve the troubling issue without being placed in a DNIF status. However, when 1) an aviator becomes so disturbed as to be placed DNIF, and 2) **IF** at the end of that period of DNIF the flight surgeon decides that the situation warrants a formal diagnosis requiring waiver action, then the waiver considerations below apply.

WAIVER: If the V Code diagnosis is a byproduct of an Axis I or II disorder, waiver action should be taken in accordance with the APL for that diagnosis. If the V Code diagnosis stands alone as an Axis I diagnosis, then a waiver will be considered when the individual has resolved the presenting problem and has returned to full functioning without medication.

DSM-IV CODES: (For diagnostic codes and criteria, see DSM-IV, page 675.)

INFORMATION REQUIRED: The submission for waiver should include (1) a recent mental health evaluation, along with treatment summaries and present status, (2) any psychological testing or evaluation reports and (3) an aeromedical summary that includes any pertinent social, occupational, legal or financial information.

TREATMENT: As indicated.

DISCUSSION: Most V Code problems resolve satisfactorily and should have no permanent impact on flight status. However, chronicity or need for medication could lead to permanent disqualification.

AEROMEDICAL CONCERNS: Personality Disorders involve an enduring pattern of inner experience and behavior that deviates markedly from expectations of the individual's culture, is pervasive and inflexible, is stable over time, and leads to marked distress or social and/or occupational impairment. These problems lead to difficulty conforming, being a team member, and making rational decisions.

WAIVERS: Personality Disorders are disqualifying for flying duties; no waiver is recommended. Exception to policy is not recommended. Reversal of a Personality Disorder disqualification at a later date is very difficult. However, if the individual demonstrates (over a period of 2-3 years) substantial improvement in terms of ability to sustain the stressors of the aviation environment, work in harmony with other members, and stabilize his or her personal life and turmoil, then the individual, with strong support from the chain-of-command and the flight surgeon, may be considered for re-evaluation by an aeromedically trained psychiatrist or psychologist. Such patients may also be referred to NAMI, Pensacola, FL, or AMCS, Brooks AFB, TX. Contact USAAMA for further information.

DSM IV CODES:

301.0 Paranoid Personality Disorder
301.20 Schizoid Personality Disorder
301.22 Schizotypal Personality Disorder
301.7 Antisocial Personality Disorder
301.83 Borderline Personality Disorder
301.50 Histrionic Personality Disorder
301.81 Narcissistic Personality Disorder
301.82 Avoidant Personality Disorder
301.6 Dependent Personality Disorder
301.4 Obsessive-Compulsive Personality Disorder
301.9 Personality Disorder NOS

(For diagnostic criteria, see DSM-IV, page 629.)

INFORMATION REQUIRED: Complete AMS including (1) results of a mental health evaluation (2) results of psychological testing for character pathology and (3) a letter from the crew member's commander regarding the individual's work performance and social adjustment in the workplace.

FOLLOW-UP: Further evaluations are at the discretion of the treating psychiatric team.

TREATMENT: Treatment is often long-term and involves intensive psychotherapy, which is not available in the military sector of care. Depending on the severity of the Personality Disorder, return to flying duties is highly improbable.

DISCUSSION: Personality disorders and traits may impact performance of military duty, including aviation duty, because of associated social, occupational, administrative, and legal ramifications. As a general rule, successful treatment requires long-term, time intensive psychotherapy that can render the service member unavailable for full duty performance for a prolonged period of time. Since personality disorders are considered, by definition, conditions that existed prior to military service, they cannot be addressed by a medical evaluation board and cannot be grounds for medical retirement. Therefore, when a personality disorder diagnosis is confirmed by mental health consultation, administrative separation due to psychological unsuitability for military service is often pursued. This administrative action requires evidence of negative impact on duty performance due to the disorder, in addition to the diagnosis of the disorder itself. Typically, other potentially medically disqualifying disorders are considered and ruled out before taking this action.

Unfortunately, many persons with personality disorders spend a long time between initial referral for evaluation and final diagnosis and disposition decision-making. Care is needed to avoid hasty over-diagnosis of personality disorders in personnel with idiosyncratic personality traits presenting for evaluation. Thus, in questions of possible administrative separation action by command, consultation with a mental health provider should be considered by the flight surgeon early on in the process. The flight surgeon and mental health provider may assist the commander in the decision-making process through explanation of personality disorder manifestations and discussion of the associated prognosis.